

Work Order ID 74431



Page 1

Thursday, September 29, 2011 12:42:14 PM

Item ID: D350-636-012

Accept



Setup Start



Revision ID:

Stop



Item Name: Skidtube RH

Start Date: 9/29/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 10/13/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: *MLJ*

Date: *9/29/11*

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2750

F

D3492

C

100

0.00



DOCUMENT CONTROL

DC

Document Control

Memo

0.00

Photocopy blue file and type labels per PPP D350-636-012 GHG 006

8/11/12/08

for MLJ 11-12-7

(1)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00



Skidtubes

Skidtubes

Skidtubes

Memo

0.00

1- Pick D2600-3 Bent

2- Deburr FWD and AFT ends, remove bending marks. Scribe batch# inside AFT end per dwg D2750

3- Drill pilot holes for blade fitting bolt holes using DT8983. Open to 0.500", deburr.

4- Locate DT8329 off of blade fitting bolt holes and drill pilot holes for blade fitting

5- Drill only two fwd step holes using DT9616. Ensure proper positioning.

6- Drill pilot holes as per Dwg D2750 sheet 4 (D2750-2 details). Drill using drill Jig DT8150 & DT8863A for first side only DT8863B for second side (detail K)

7- Clecko DT8863B on second side of tube and drill pilot holes for detail B.
SECOND SIDE

8- Open up holes for Detail B to 0.375" (4 holes per side) and blade fitting location holes to 0.500" (total of 4 holes per side) as per dwg D2750. Open up holes for ground handling and detail L to 0.500" (8 holes per side)

9- Drill pilot holes for wearplates as per Dwg D2750 using DT8108 open to 0.297".

10- Open up holes of Detail A to 0.297" (total of 2 holes per side)

SAP 11-10-05

①

OK 11/11/16

OK 11/11/17

OK
a/u/17

P10 →

W/O:		74431 WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D30-636 012 PAR #: _____ Fault Category: Landing Gear / S140 rule NCR: Yes No DQA: OK Date: 11/12/12
 Resolution: Scrap Disposition: Scrap QA: N/C Closed Date: 11/12/12

NCR: 11-1058		1588.01 WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/10/14	# 140 →	1st Aft hole was Drilled in a angle causing hole to be 0.010" off from dim to size	U 11-10-14 DS102	- Scrap + Destroy (no cap + no other work done on tube). + Repair B <u>75021</u>	B 11/10/14	S 11/11/13	U 11-10-14 DS1 012	S 11/10/14
		R.L. operator error. (Drawn is clear who is clear hole is good)						S 11/10/14

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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11-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left
from bending as per QSI 004
A/R Aluminum Rod batch: M118735 DE-11-11-17

12-Grind welds flush as per Dwg D2750

SC u u u 18

120

QC10- Inspect visual per QSI004- ground welds

0.00

S u l u l u s



QC

Memo

0.00

Quality Control

130

QC5- Inspect part completeness to step on W/O

0.00

S u l u l u s



QC

Memo

0.00

Quality Control

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140	Chemical Conversion Obat per QSI005 4.1	0.00							
	HandFinish	0.00							
	Memo								
	Hand Finishing								
150	QC3- Inspect Part Finish	0.00							
	QC	0.00							
	Memo								
	Quality Control								

11-11-18 (K1)

11-11-22 (V)

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

0.00



Skidtubes

Skidtubes

Memo

0.00

1-Open up holes of Detail L and ground handling to 0.625" (total of 8 holes per side) as per dwg D2750.

2-Open up holes of Detail K to 0.750" (total of 4 holes per side) as per dwg D2750. ✓

3-Open float holes to .500" (4 per Side) ✓

4-Chamfer holes of Detail K, L, ground handling and float holes per dwg D2750 (welding instructions on sheet 9)

5-Deburr and blow out all chips from inside of tube ✓

6-Prepare tube for welding, remove alodine as required. ✓

7-Bond web D2739 in place as per QSI 015

A/R ☐ Sikaflex-291

batch: 119399

☐ ☐ ☐

exp. date: 12/08/13

OK 11/11/22

8- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004 (welding instructions on sheet 9)

A/R ☐ Aluminum Rod

batch: M118735

BE11-12-02

9- At section AP-AP drill out x-bolt spacer to 0.404"

10-Grind welds flush as per Dwg D2750

11-Spot face ground handling holes section (total of 4 places per side) as per

DP 11-12-5

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
	dwg D2750								
	12-Deburr holes								
170	QC10- Inspect visual per QSI004- ground welds	0.00							
QC	Memo	0.00							
Quality Control									
180	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

DP 11-12-5

Suliz/05

Suliz/05

W/O:		WORK ORDER CHANGES					
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Pressure Wash per QSI005 4.3	0.00				1	11-12-5.		
	HandFinish	0.00							
Hand Finishing	Memo Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch.								
200	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum	0.00							
	Powdercoat	0.00							
Powder Coating	Memo START TIME: 8-40 OVEN TEMPERATURE: 320 OF- FINISH TIME: 9-10								
210	QC3- Inspect Part Finish	0.00							
	QC	0.00							
Quality Control	Memo Inspect for foreign object per QSI 024								

1X4 M-L 11/12/06

1 B2 11-12-7.

M118439

W/O:		WORK ORDER CHANGES					
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

230

0.00



HandFinishing

HandFinish

Memo

0.00

Hand Finishing

1-Install inserts as per dwg D2750

2-Inspect for Foreign Objects

3-Spray inside of tube with "LPS-3"
batch: N/A4-Install blade fitting D3488-042, wearshoes and ground handling hardware as
per dwg D2750

SIKA FLEX 241

BATCH: 119443EXP DATE: 12/15-assemble o-ring to plug as per dwg D3492 and apply o-ring lube
A/R 55-o-ring lube batch: 1103486-Coat all exposed fasteners with "LPS Procyon"
batch: 1145961 BL 11-12-7

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
240 QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00		8/11/12/09					
250 Packaging Packaging	Pick Kit Memo	0.00 0.00							SP 11-12-07
260 QC Quality Control	QC4- 100% Inspect kits for completeness Memo	0.00 0.00		8/11/12/09					(70)

W/O:		WORK ORDER CHANGES					
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
270 	Packaging	0.00							
Packaging	Memo	0.00		Reo J					
Packaging	Package as per PPP D350-636-012								
280 	QC21- Final Inspection - Work Order Release	0.00							
QC	Memo	0.00							
Quality Control									

Rec'd 11/12/08

11/12/08

MF 11-12-08

W/O:		WORK ORDER CHANGES					
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Picklist Print

Page 1

Thursday, September 29, 2011 12:42:40 PM

Work Order ID: 74431

Parent Item: D350-636-012

Parent Item Name: Skidtube RH



Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev: I 02.09.25 Rearranged procedure steps KJ
 IPP Rev: J 06-03-29 As per Rev D EC
 IPP Rev: K 06-07-13 As per dsi9343 EC
 IPP Rev: L 07-07-28 Added SS Wearplates (Rev E) JLM Verified By: EC
 IPP Rev: M 08-04-22 update steps 4, 13 DD verified by: EC
 IPP Rev: N 08-09-23 revF as per dwg DD verified by: ec IPP Rev: O
 10.06.22 revise seq 110 DD verf: EC IPP Rev: P 10.10.01 as per
 IIN revH DD verf: EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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ALS4-1032-225

Purchased

No

Each

1,852.000

38



Insert

Location

Loc Qty

Loc Code

ST282

1852

110768

62

118386

860

118966

930

38

AN3C5A

Purchased

No

230

Each

1,020.000

34

34



Bolt

Location

Loc Qty

Loc Code

FP-A

7

115835

7

ST350

1013

116419

28

117343

314

117764

169

117872

2

118451

500

34

BL 11-12-7

BL 11-12-7

34

W/O:		WORK ORDER CHANGES					
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Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C6A

Purchased

No

230

Each

256.0000

4

4



BOLT



BR 11-12-7.

Location

Loc Qty

Loc Code

FP-A

1

111982

1

ST351

255

111982

2

116419

23

116549

2

116704

12

117619

10

117688

1

117872

5

118422 ✓

200

4

AN6C44A

Purchased

No

230

Each

107.0000

4

4



BOLT



BR 11-12-7.

Location

Loc Qty

Loc Code

FG

2

103964

2

ST344

105

118332

15

118387

50

118985

40

4.

W/O:		WORK ORDER CHANGES					
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Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

AN8C35A

Purchased

No

230

Each

119.0000

1

1



BOLT



BL 11-12-7.

Location

Loc Qty

Loc Code

FP

83

117511

17

118286

66

FP-A

1

115960

1

ST345

34

117834

34

ST346

1

114442

0

115188

0

115960

1

AN960C10L

~~*~~ NAS1149C0332
R

Purchased

No

230

Each

0.0000

38

38



washer

D2745

Manufactured

No

230

Each

213.0000

8

8



Bushing



38

BL 11-12-7.

119736

Location

Loc Qty

Loc Code

FP-A

51

69529

51

ST023

162

71835

162

74446

4

4

BL 11-12-7.

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Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D3488-042

Manufactured No

230

Each

21.0000

1

1



Blade Fitting Assembly, RH



BL 11-12-7.

Location

Loc Qty

Loc Code

FP008

21

62003

1

69904

9

71883 ✓

11

D3492-1

Manufactured No

230

Each

126.0000

8

8



Plug



BL 11-12-7.

* 3492-041

70485

Location

Loc Qty

Loc Code

FP

126

69531

8

73402

118

D3492-3

Manufactured No

230

Each

85.0000

8

8



Plug



BL 11-12-7.

Location

Loc Qty

Loc Code

FP

85

71838

76

72126

9

D3535-25

Manufactured No

230

Each

21.0000

1

1



Wearshoe



BL 11-12-7.

Location

Loc Qty

Loc Code

FP018

21

62233

1

69743

7

73424

13

74525

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:41 PM

Work Order ID: 74431

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D3536-25 Manufactured No

230

Each

11.0000

1

1



Gasket

Location

Loc Qty

Loc Code

FP012

74595.

11

70780

11

1

BR 11-12-7.

D3537-1 Manufactured No

230

Each

159.0000

3

3



Wearpad

Location

Loc Qty

Loc Code

FP001

74436.

152

72124

32

73394

60

73395

60

FP017

7

69817

5

70686

2

3

BR 11-12-7.

D3631-1 Manufactured No

230

Each

155.0000

8

8



Washer

Location

Loc Qty

Loc Code

ST072

75548.

155

68062

155

8

BR 11-12-7.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:41 PM

Work Order ID: 74431

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D3791-1 Manufactured No

230

Each

18.0000

1

1



Wearplate



BR 11-12-7.

Location

Loc Qty

Loc Code

FP017

74598

6

62239

2

69282

4

FP17

12

72158

12

D3793-1 Manufactured No

230

Each

24.0000

1

1



Wearshoe



BR 11-12-7.

Location

Loc Qty

Loc Code

FP001

74591

14

73422

14

FP018

10

70781

10

D3793-3 Manufactured No

230

Each

16.0000

1

1



Wearshoe



BR 11-12-7.

Location

Loc Qty

Loc Code

FP018

74528

16

70813

4

72160

12

D3794-1 Manufactured No

230

Each

16.0000

1

1



Gasket



BR 11-12-7.

Location

Loc Qty

Loc Code

FP010

74594

16

70779

16

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:42 PM

Work Order ID: 74431



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D3794-3

Manufactured No

230

Each

7.0000

1

1



Gasket



BR 11-12-7.

Location

Loc Qty

Loc Code

FP018

74530

7

70812

7

MS21043-6

Purchased

No

230

Each

529.0000

4

4



BR 11-12-7.

NUT

Location

Loc Qty

Loc Code

FG

20

103693

20

ST301

112314 ✓

509

117887

299

117887

10

118384

200

MS21083C8

Purchased

No

230

Each

85.0000

1

1



BR 11-12-7.

NUT

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

12

118077

12

ST303

72

115884

0

118354

22

118614 ✓

50

1

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:42 PM

Work Order ID: 74431



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1149C0832R

Purchased

No

230

Each

351.0000

1

1



WASHER



BR 11-10-7.

Location

Loc Qty

Loc Code

FP-B

23

114915 ✓

23

ST297

328

114915

328

1

NAS1515H3L

Purchased

No

230

Each

141.0000

4

4



WASHER



BR 11-12-7.

Location

Loc Qty

Loc Code

FG

40

102472

40

ST277

101

113362

57

118686

44

4

NAS1611-010

Purchased

No

230

Each

143.0000

8

8



O-RING



BR 11-12-7.

Location

Loc Qty

Loc Code

FP

129

117460

8

118077

1

118612

120

FP-A

14

110915

14

8

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Page 9

Thursday, September 29, 2011 12:42:43 PM

Work Order ID: 74431

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

NAS1611-013

Purchased

No

230

Each

140.0000

8

8



O-RING

Location

Loc Qty

Loc Code

FP

119307

55

117291

2

117887

53

FP-A

85

116582

5

118384

80

8

BR 11-12-7

AN8C21A

Purchased

No

250

Each

81.0000

2

2



BOLT

Location

Loc Qty

Loc Code

ST345

81

118045

31

118758

50

250

Each

33.0000

1

2x

D2741

Manufactured

No



Blade, 350 Skidtube

Location

Loc Qty

Loc Code

ST466

33

70667

33

250

Each

65.0000

2

2

D3493-1

Manufactured

No



Washer

Location

Loc Qty

Loc Code

ST062

65

70697

27

71846

38

2x

SP 11-12-07

Thursday, September 29, 2011 12:42:43 PM

Shop Packet Print

Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:43 PM

Work Order ID: 74431

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D3532-1

Manufactured No

250

Each

36.0000

2

2



Spacer



B 74880 SP

Location

Loc Qty

Loc Code

ST065

15

69895

15

ST068

21

73342

21

MS21083C8

Purchased No

250

Each

85.0000

2

2



NUT



M 119638 SP

Location

Loc Qty

Loc Code

FP-B

1

115884

1

ST293

12

118077

12

ST303

72

115884

0

118354

22

118614

50

NAS1149D0863J

Purchased No

250

Each

142.0000

2

2



WASHER



SP 11-12-07

Location

Loc Qty

Loc Code

ST298

142

118078

142

2x

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:43 PM

Work Order ID: 74431



Parent Item: D350-636-012



Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D2600-3-BENT

Manufactured No

110

Each

18.0000

1

1



Extrusion Bent

Location

Loc Qty

Loc Code

LG

75021

18

66875

8

73253

10

①

DL
11/11/16

D2744

Manufactured No

110

Each

73.0000

1

1



Cap

Location

Loc Qty

Loc Code

LG002

17

62715

1

70881

16

WA

56

71861

56

1

DL 11/11/17

D2739

Manufactured No

160

Each

8.0000

1

1



350 I Beam

Location

Loc Qty

Loc Code

LG

8

72154

4

72155

4

76867

DL
11/11/22

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, September 29, 2011 12:42:44 PM

Work Order ID: 74431

Parent Item: D350-636-012

Parent Item Name: Skidtube RH

Start Date: 9/29/2011

Required Date: 10/13/2011

Start Qty: 1.00

Required Qty: 1.00

D2743 Manufactured No 160 Each 230.0000 8 8



Crossbolt Spacer



BE11-12-02
B76141 x8

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	172	
69818	5	
71839	103	
73403	64	
LG001	58	
67766	4	
68251	54	

D3490-3 Manufactured No 160 Each 70.0000 4 4



Cross Bolt Spacer



BE11-12-02
B76234 x4

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	70	
70768	10	
73295	60	

D3490-1 Manufactured No 160 Each 82.0000 4 4



Cross Bolt Spacer



BE11-12-02
B76233 x1
B74875 x3

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
LG	80	
67773	5	
69823	10	
71841	65	
LG001	2	
62450	2	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

QTY -041	QTY -042	QTY -043	QTY -044	PART NUMBER	DESCRIPTION
X				D2750-041	350 SKIDTUBE ASSEMBLY, LH
	X			D2750-042	350 SKIDTUBE ASSEMBLY, RH
		X		D2750-043	350 SKIDTUBE ASSEMBLY, LH
			X	D2750-044	350 SKIDTUBE ASSEMBLY, RH
1	1	1	1	D2739	WEB
8	8	8	8	D2743	SPACER
1	1	1	1	D2744	CAP
8	8	8	8	D2745	BUSHING
1				D2750-1	SKIDTUBE WELDMENT, LH
	1			D2750-2	SKIDTUBE WELDMENT, RH
		1		D2750-3	SKIDTUBE WELDMENT, LH
			1	D2750-4	SKIDTUBE WELDMENT, RH
1		1		D3488-041	BLADE FITTING, LH
	1		1	D3488-042	BLADE FITTING, RH
4	4	4	4	D3490-1	SPACER
4	4			D3490-3	SPACER
		4	4	D3490-5	SPACER
8	8	8	8	D3492-041	PLUG ASSEMBLY
8	8			D3492-043	PLUG ASSEMBLY
		8	8	D3492-045	PLUG ASSEMBLY
1	1	1	1	D3535-25	WEARSHOE
1	1	1	1	D3536-25	GASKET
3	3	3	3	D3537-1	WEARPAD
8	8	8	8	D3631-1	WASHER
1	1	1	1	D3791-1	WEARPLATE
1	1	1	1	D3793-1	WEARSHOE
1	1	1	1	D3793-3	WEARSHOE
1	1	1	1	D3794-1	GASKET
1	1	1	1	D3794-3	GASKET
38	38	38	38	ALS4-1032-225	INSERT (OR ALS7-1032-225, AKS4-1032-225, AELS-1032-225)
34	34	34	34	AN3C5A	BOLT
4	4	4	4	AN3C6A	BOLT
4	4	4	4	AN6C44A	BOLT
1	1	1	1	AN8C35A	BOLT
38	38	38	38	AN960C10L	WASHER
1	1	1	1	AN960C816L	WASHER
4	4	4	4	MS21043-5	NUT
1	1	1	1	MS21083C8	NUT
4	4	4	4	NAS1515H3L	WASHER

GENERAL NOTES:

- MATERIAL: MAKE D2750-1/-2/-3/-4 FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
- FINISH:
ACID ETCH, ALONDE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
- TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- UNITS: INCHES UNLESS OTHERWISE NOTED
- BREAK SHARP EDGES: N/A
- IDENTIFICATION: N/A
- WEIGHT: D2750-041/-042/-043/-044 = 26.5 LBS
- WELD PER DART QSI 004
- INSTALL ALS4-1032-225 INSERTS AFTER FINISH AS INDICATED. DRILL 'F' SIZE HOLES (Ø0.297) FOR WEARSHOE INSERTS
- FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 KSI
MINIMUM ULTIMATE TENSILE STRENGTH = 38 KSI
- SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS.
COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY. CLEAN EXCESS OFF
POWDER COATING WITH MEK DEGREASER.
- SPACER AND PLUG INSTALLED SAME AS SECTION AJ-AJ EXCEPT HORIZONTAL
- SPACER AND PLUG INSTALLED SAME AS SECTION AP-AP EXCEPT HORIZONTAL

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 74431

M.L.O
9/29/11

RELEASED

F	INCORPORATE DSI 9413; QTY (3) D3537-1 WAS QTY (5) (ZN C8-1); D3791-1/3 REPLACES D3535-13/35 (ZN C8-1); D3794-1/3 REPLACES D3536-13/35 (ZN B8-1); ADD D3791-1 (ZN C8-1); WEARSHOE HOLES UNDER FWDIAFT SADDLE REMOVED (8 PL). WEARSHOE HARDWARE QTY UPDATED (ZN B8-1); D3488-041/-042 HARDWARE UPDATED (ZN C1-8, 9, 10, 11); ADD NOTE 12 AND 13 (ZN A6-1); REASON: REF. NCR 08-043	PH	08.07.16
E	CHANGE TO STAINLESS STEEL WEARPLATES; ADD RUBBER GASKETS; CHANGE INSERTS; ADD D3631-1; REMOVE QTY (38) NAS1515H3L; REMOVE QTY (10) NAS1515H8L; REMOVE D2741; QTY (2) AN960C816; REMOVE QTY (2) MS21083C8	CB	07.05.17
D	ADD HOLES AND SPACERS FOR APICAL FLOATS; INCORPORATE DEO 9133/8157	PH	06.01.05
C	ADD D2750-3/D2750-4; INCORPORATE D2738 AND D2740	CP	98.11.18
B	CHANGE MS24694-S293 TO AN8-16A	CP	98.09.01
A	NEW ISSUE	DS	98.04.16
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.16		

DART AEROSPACE USA, INC. PORT HADLOCK, WA	
DRAWING NO. D2750	REV. F SHEET 1 OF 11
TITLE 350 SKIDTUBE ASSEMBLY	SCALE NTS
COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

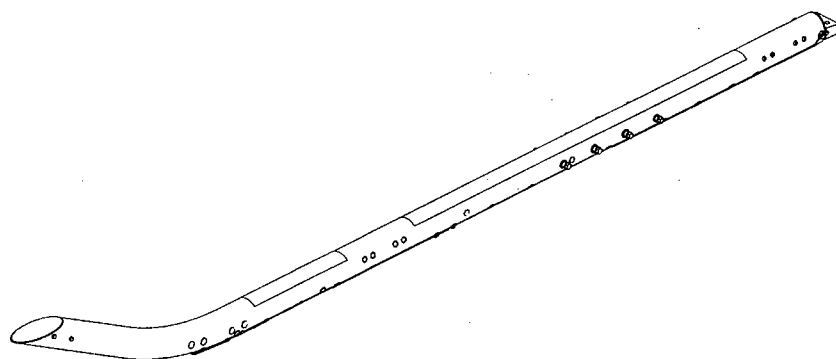
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

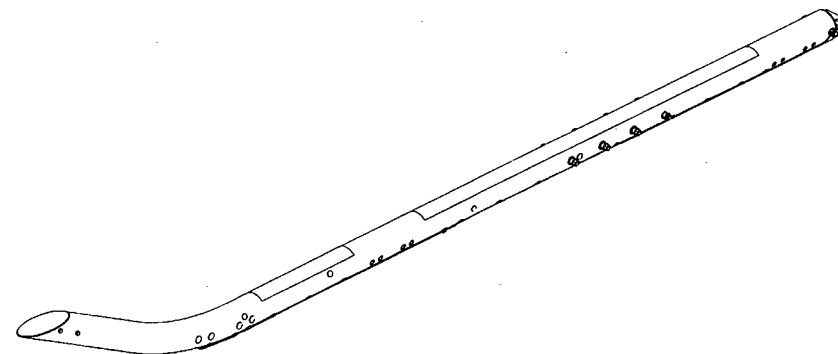
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74431



D2750-041 350 SKIDTUBE ASSEMBLY, LH



D2750-042 350 SKIDTUBE ASSEMBLY, RH

RELEASED
8-22-77

DESIGN	PM	DART AEROSPACE USA, INC.	
DRAWN	PM	PORT HADLOCK, WA	
CHECKED	PM	DRAWING NO.	REV. F
MFG. APPR.	PM	D2750	SHEET 2 OF 11
APPROVED	PM	TITLE	SCALE
DE APPR.	PM	350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1998 BY DART AEROSPACE USA, INC.</small> <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR DISCLOSED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

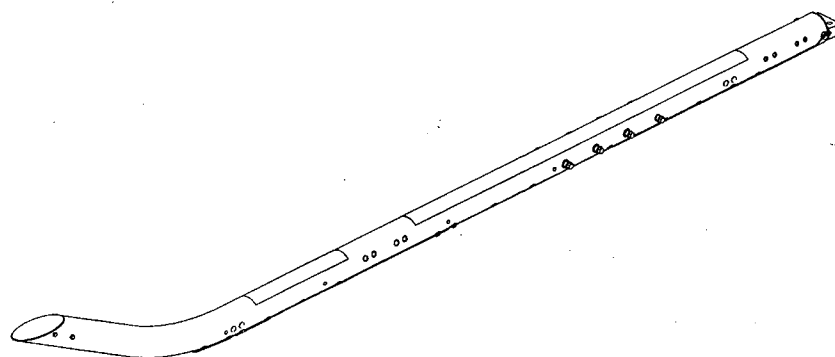
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

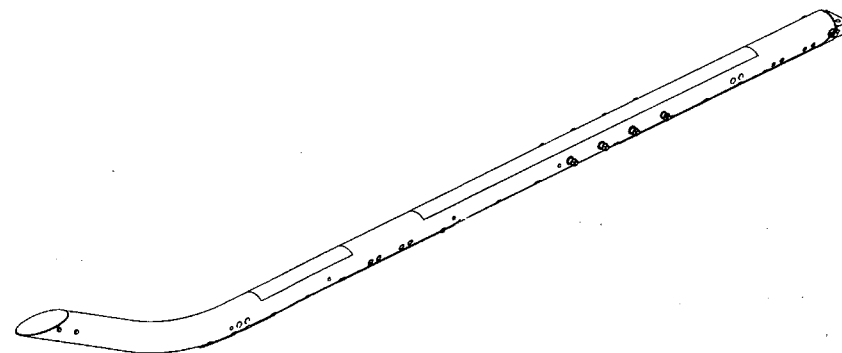
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74431



D2750-043 350 SKIDTUBE ASSEMBLY, LH



D2750-044 350 SKIDTUBE ASSEMBLY, RH

RELEASED
68-9-22-14

DESIGN	PD	DART AEROSPACE USA, INC.	
DRAWN	PD	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 3 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	<small>COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

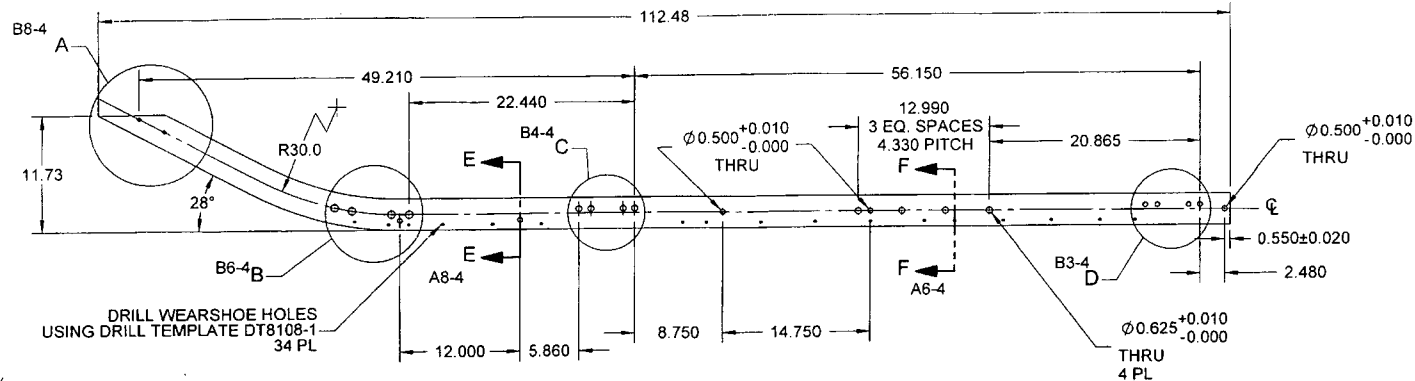
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

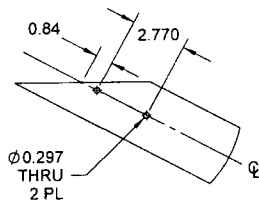
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

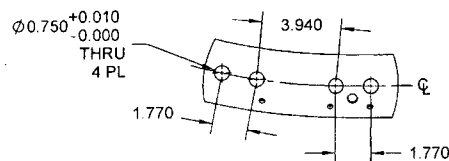
74431



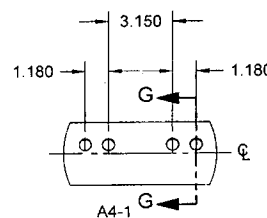
D2750-1 LH SKIDTUBE



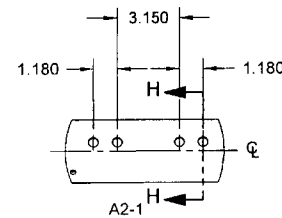
DETAIL A
SCALE 2X



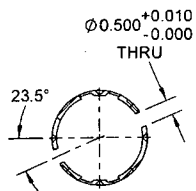
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SCALE 2X



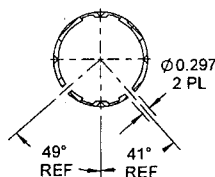
DETAIL C
SCALE 2X



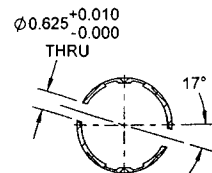
DETAIL D
SCALE 2X



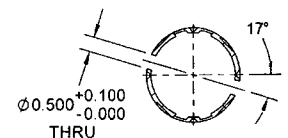
SECTION E-E
SCALE 3X, 2 PL



SECTION F-F
SCALE 3X, 17 PL



SECTION G-G
SCALE 3X, 4 PL



SECTION H-H
SCALE 3X, 4 PL

RELEASED
08-09-22/187

DESIGN	100	DART AEROSPACE USA, INC.	
DRAWN	100	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 4 OF 11
APPROVED		TITLE	SCALE
DE APPR.		350 SKIDTUBE ASSEMBLY	NTS
DATE	08.07.16	COPYRIGHT © 1998 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

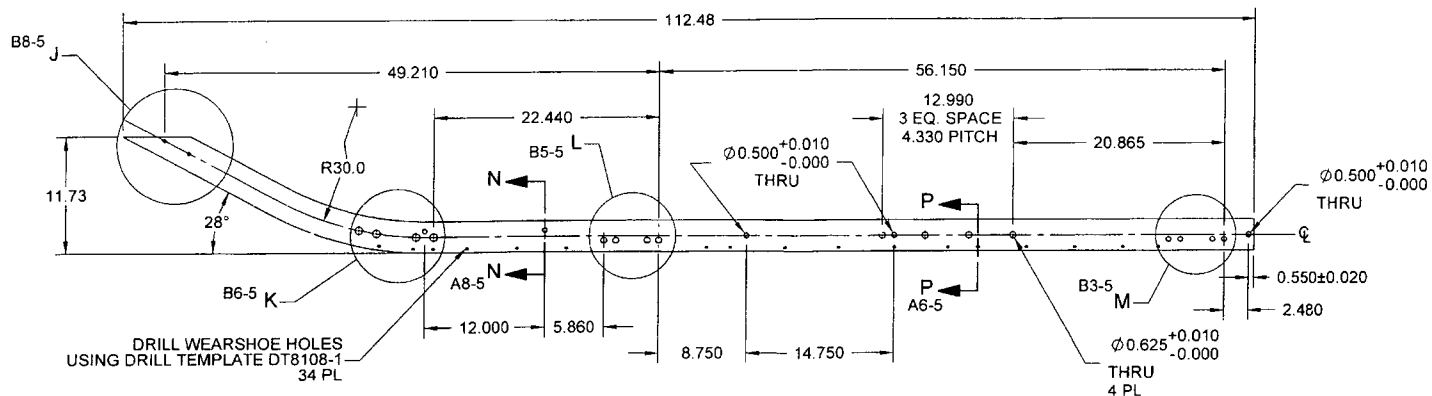
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

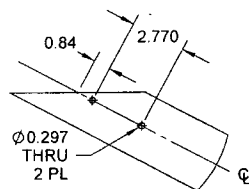
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

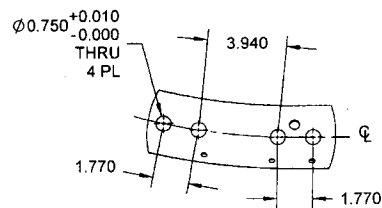
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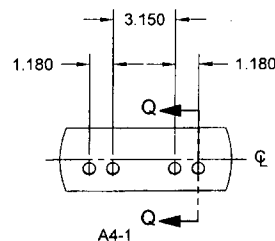
D2750-2 RH SKIDTUBE



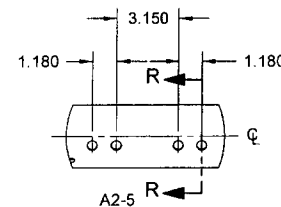
DETAIL J
SCALE 2X



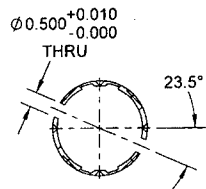
DETAIL K
SCALE 2X



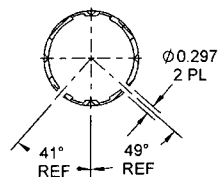
DETAIL L
SCALE 2X



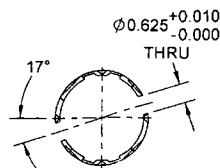
DETAIL M
SCALE 2X



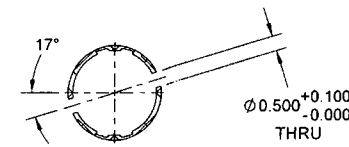
SECTION N-N
SCALE 3X, 2 PL



SECTION P-P
SCALE 3X, 17 PL



SECTION Q-Q
SCALE 3X, 4 PL



SECTION R-R
SCALE 3X, 4 PL

RELEASED

DESIGN	PA	DART AEROSPACE USA, INC.	
DRAWN	PA	PORT HADLOCK, WA	
CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 5 OF 11
APPROVED		TITLE	SCALE
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

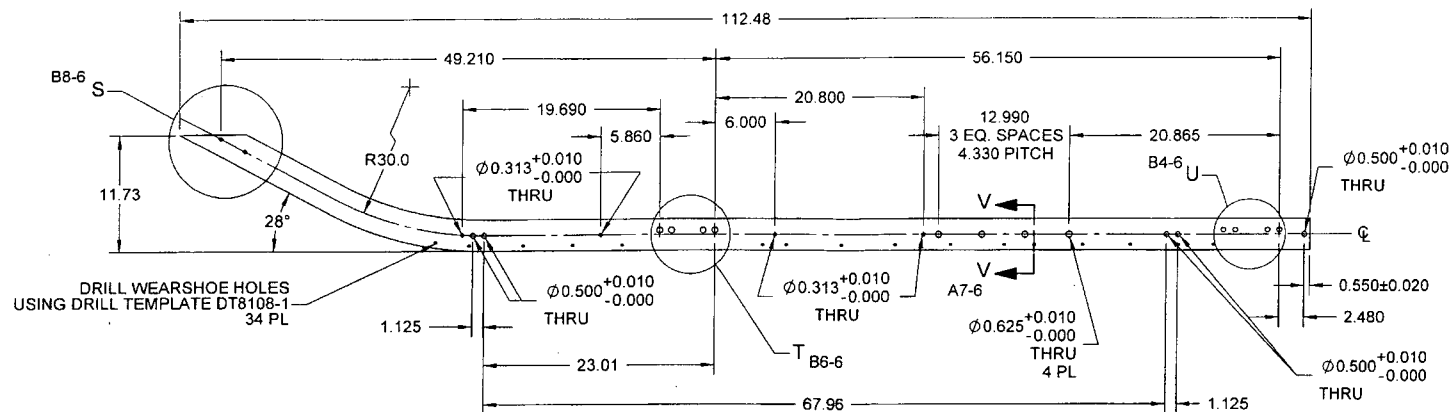
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

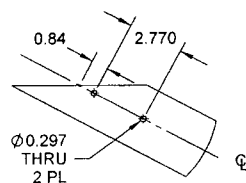
NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

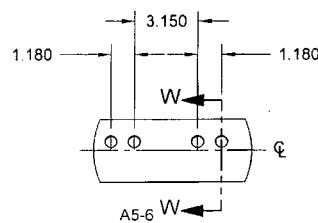
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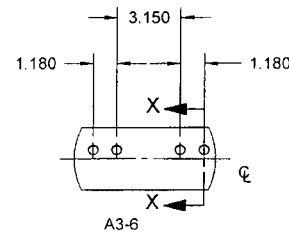
D2750-3 LH SKIDTUBE



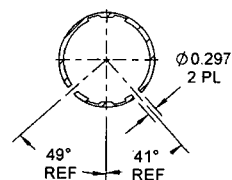
DETAIL S
SCALE 2X



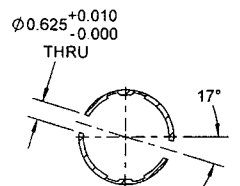
DETAIL T
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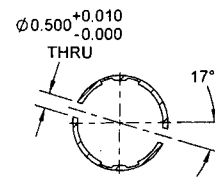
DETAIL U
SCALE 2X



SECTION V-V
SCALE 3X, 17 PL



SECTION W-W
SCALE 3X, 4 PL



SECTION X-X
SCALE 3X, 4 PL

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CHECKED		DRAWING NO.	REV. F
MFG. APPR.		D2750	SHEET 6 OF 11
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

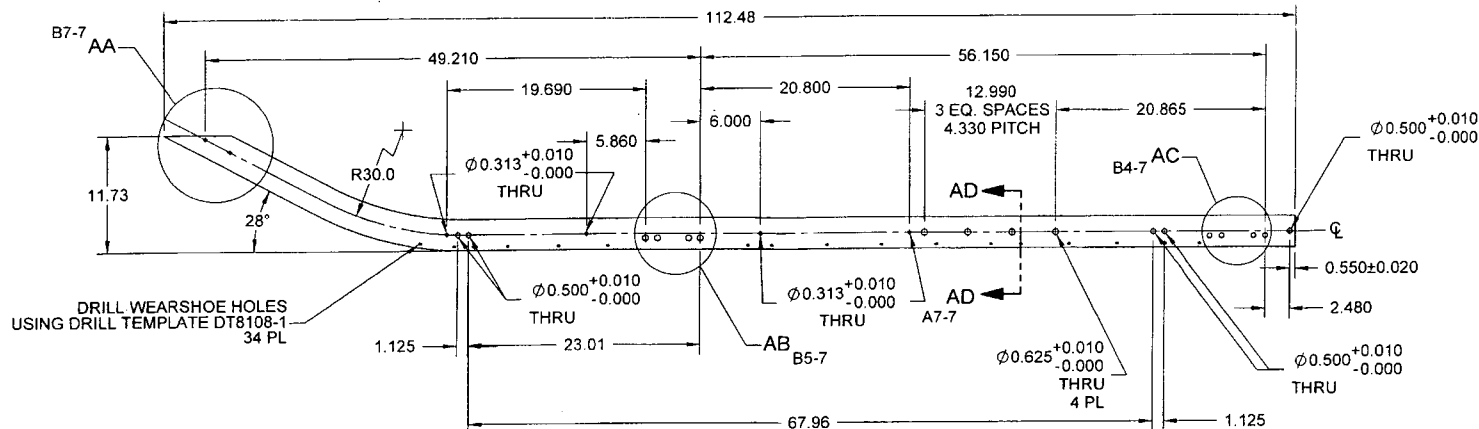
Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

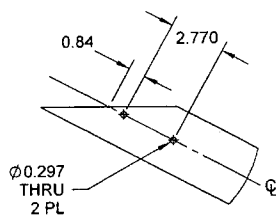
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

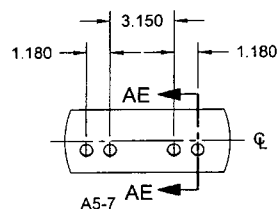
744131



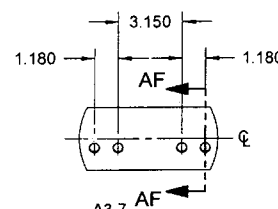
D2750-4 RH SKIDTUBE



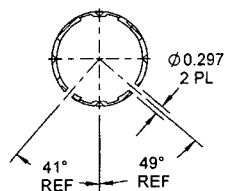
DETAIL AA
D7-7
SCALE 2X



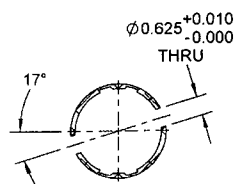
DETAIL AB
C4-7
SCALE 2X



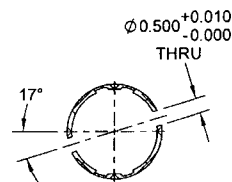
DETAIL AC
D3-7
SCALE 2X



SECTION AD-AD
D3-7
SCALE 3X, 17 PL



SECTION AE-AE
B6-7
SCALE 3X, 4 PL



SECTION AF-AF
B4-7
SCALE 3X, 4 PL

RELEASED
060422/10

DESIGN	PA	DART AEROSPACE USA, INC.	
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CHECKED	PA	DRAWING NO.	REV. F
MFG. APPR.	PA	D2750	SHEET 7 OF 11
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

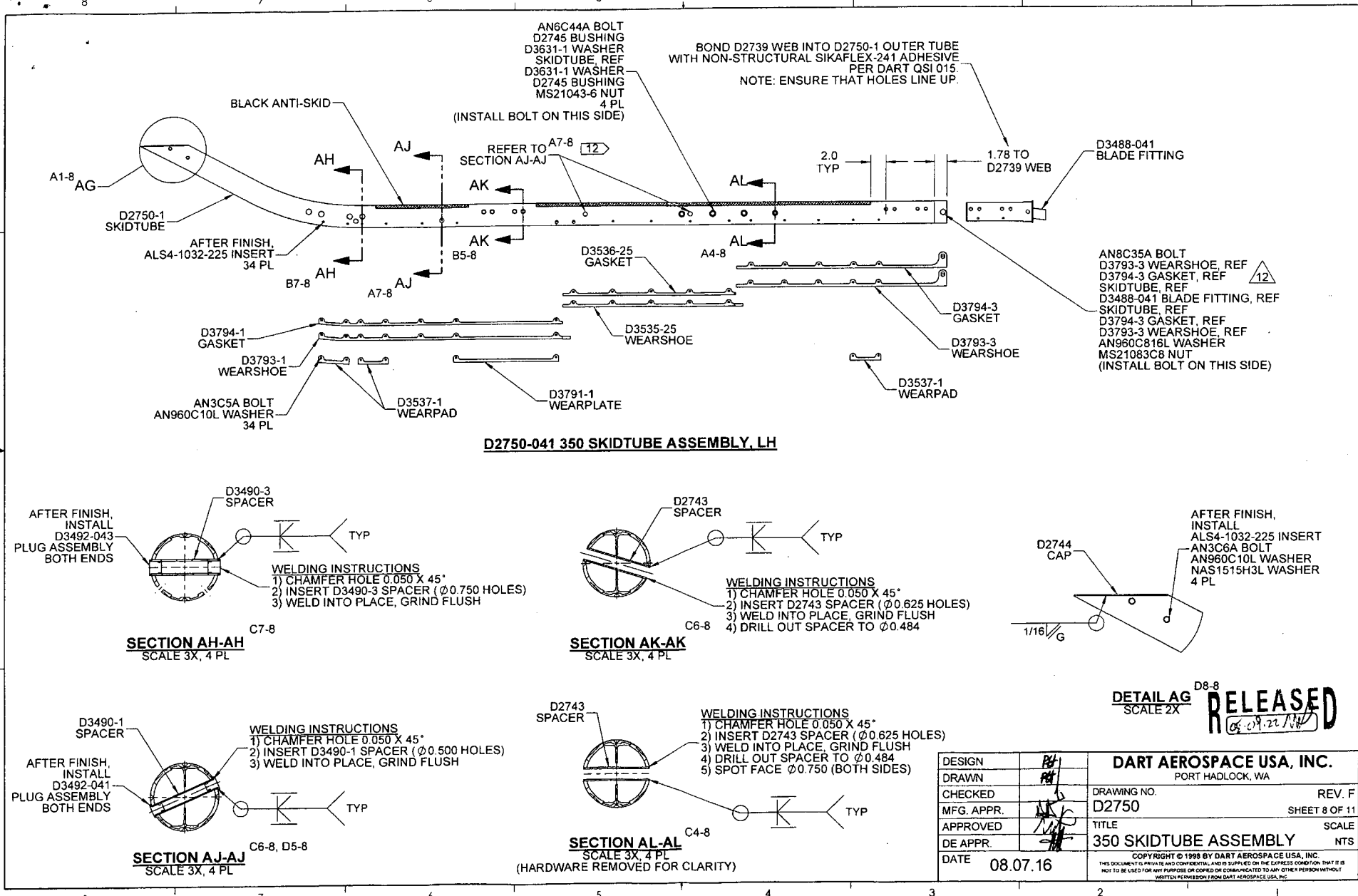
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74431



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

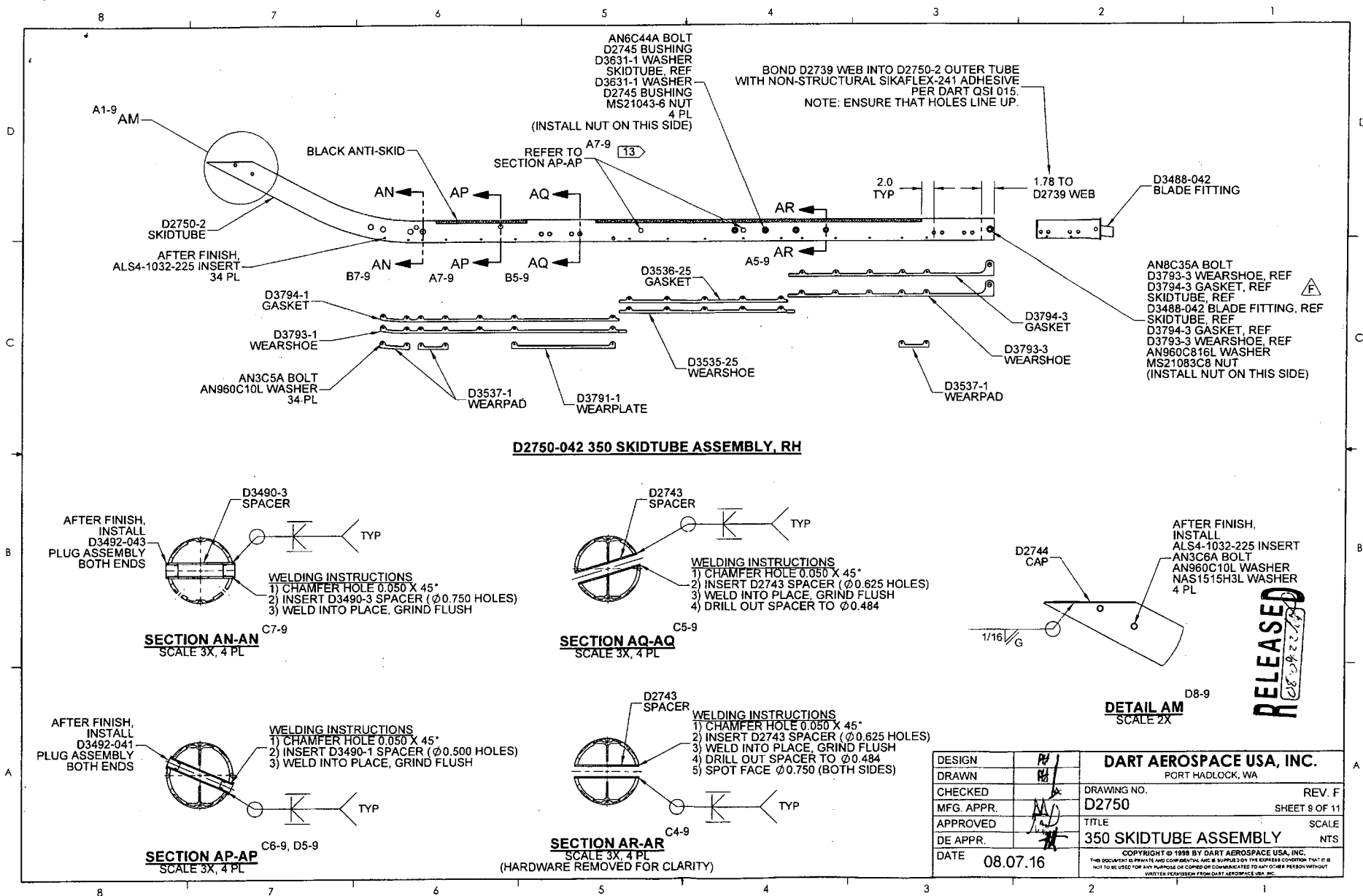
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

74431



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Technical drawing of a blade assembly, showing various components and callouts. The drawing includes a cross-section view of the blade and a side view of the blade fitting. The blade is labeled with various part numbers and dimensions.

Callouts and Dimensions:

- AN6C44A BOLT
- D2745 BUSHING
- D3631-1 WASHER
- SKIDTUBE, REF
- D3631-1 WASHER
- D2745 BUSHING
- MS21043-6 NUT
- 4 PL
- (INSTALL BOLT ON THIS SIDE)
- BLACK ANTI-SKID
- REFER TO SECTION AW-AW
- A4-10
- AT
- AU
- AV
- AW
- 2.0 TYP
- 1.78 TO D2739 WEB
- D3488-041 BLADE FITTING
- D2750-3 SKIDTUBE
- AFTER FINISH, ALS4-1032-225 INSERT 34 PL
- REFER TO SECTION AU-AU
- A7-10
- B7-10
- D3536-25 GASKET
- A7-10
- B4-10
- A4-10
- D3794-1 GASKET
- D3793-1 WEARSHOE
- AN3C5A BOLT
- AN960C10L WASHER
- 34 PL
- D3537-1 WEARPAD
- D3791-1 WEARPLATE
- D3535-25 WEARSHOE
- D3794-3 GASKET
- D3793-3 WEARSHOE
- D3537-1 WEARPAD
- AN8C35A BOLT
- D3793-3 WEARSHOE, REF
- D3794-3 GASKET, REF
- SKIDTUBE, REF
- D3488-041 BLADE FITTING, REF
- SKIDTUBE, REF
- D3794-3 GASKET, REF
- D3793-3 WEARSHOE, REF
- AN960C816L WASHER
- MS21083C8 NUT
- (INSTALL BOLT ON THIS SIDE)
- BOND D2739 WEB INTO D2750-3 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015
- NOTE: ENSURE THAT HOLES LINE UP.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

AN6C44A BOLT
D2745 BUSHING
D3631-1 WASHER
SKIDTUBE, REF
D3631-1 WASHER
D2745 BUSHING
MS21043-6 NUT
4 PL
(INSTALL NUT ON THIS SIDE)

2.0 TYP

1.78 TO D2739 WEB

D3488-042 BLADE FITTING

AN8C35A BOLT
D3793-3 WEARSHOE, REF
D3794-3 GASKET, REF
SKIDTUBE, REF
D3488-042 BLADE FITTING, REF
SKIDTUBE, REF
D3794-3 GASKET, REF
D3793-3 WEARSHOE, REF
AN960C816L WASHER
MS21083C8 NUT
(INSTALL NUT ON THIS SIDE)

12

D3793-1 WEARSHOE
AN3C5A BOLT
AN960C10L WASHER
34 PL
D3537-1 WEARPAD
D3791-1 WEARPLATE
D3535-25 WEARSHOE
D3794-1 GASKET
D3794-3 GASKET
D3537-1 WEARPAD
D3793-3 WEARSHOE
D3536-25 GASKET
A7-11
B4-11
A4-11
BE
BD
BC
BB
B7-11
REFER TO SECTION BC-BC
REFER TO SECTION BE-BE
D2750-4 SKIDTUBE
ALS4-1032-225 INSERT
34 PL
AFTER FINISH
A1-11
BA
BLACK ANTI-SKID

BOND D2739 WEB INTO D2750-4 OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015. NOTE: ENSURE THAT HOLES LINE UP.

D2743
SPACER

TYP

WELDING INSTRUCTIONS

- 1) CHAMFER HOLE 0.050 X 45°
- 2) INSERT D2743 SPACER (Ø 0.625 HOLES)
- 3) WELD INTO PLACE, GRIND FLUSH
- 4) DRILL OUT SPACER TO Ø 0.484

SECTION BB-BB

D6-11

SCALE 3X, 4 PL

WELDING INSTRUCTIONS

- 1) CHAMFER HOLE 0.050 X 45°
- 2) INSERT D2743 SPACER (Ø 0.625 HOLES)
- 3) WELD INTO PLACE, GRIND FLUSH
- 4) DRILL OUT SPACER TO Ø 0.484
- 5) SPOT FACE Ø 0.750 (BOTH SIDES)

D2743 SPACER

D4-11

SECTION BD-BD

SCALE 3X, 4 PL

(HARDWARE REMOVED FOR CLARITY)

AFTER FINISH, INSTALL D3492-045 PLUG ASSEMBLY BOTH ENDS

D3490-5 SPACER

WELDING INSTRUCTIONS

- 1) CHAMFER HOLE 0.050 X 45°
- 2) INSERT D3490-5 SPACER (Ø 0.313 HOLES)
- 3) WELD INTO PLACE, GRIND FLUSH

D5-11, C6-11

TYP

SECTION BC-BC

SCALE 3X 4 PL

AFTER FINISH,
 INSTALL
 D3492-041
 PLUG ASSEMBLY
 BOTH ENDS

D3490-1
 SPACER

WELDING INSTRUCTIONS
 1) CHAMFER HOLE 0.050 X 45°
 2) INSERT D3490-1 SPACER (Ø 0.500 HOLES)
 3) WELD INTO PLACE, GRIND FLUSH

TYP

D4-11, D7-11

SECTION BE-BE
 SCALE 3X, 4 PL

DESIGN
DRAWN
CHECKED
MFG. APPR.
APPROVED
DE APPR.

RELEASED
06-09-22 / 111

Technical drawing of a detail of a structure, showing a cross-section of a plate with a hole and a bolt. The drawing includes dimensions and part numbers.

Dimensions and Part Numbers:

- 1/16" G (Dimension of the hole)
- D2744 CAP (Part number of the cap)
- AN36A BOLT (Part number of the bolt)
- AN960C10L WASHER (Part number of the washer)
- NAS1515H3L WASHER 4 PL (Part number of the washer)

Labels:

- AFTER FINISH
- INSTALL
- ALS4-1032-225 IN SERT

Detail Label:

- DETAIL BA
- SCALE 2X
- D8-11

DESIGN	<i>PH</i>	DART AEROSPACE USA, INC. PORT HADLOCK, WA DRAWING NO. D2750 TITLE 350 SKIDTUBE ASSEMBLY COPYRIGHT © 1988 BY DART AEROSPACE USA, INC. <small>THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. AGRIS SUPPLY, INC. HAS THE EXPRESS CONSENT THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE USA, INC.</small>	REV. F
DRAWN	<i>PH</i>		SHEET 11 OF 11
CHECKED	<i>[Signature]</i>		SCALE
MFG. APPR.	<i>[Signature]</i>		NTS
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>		
DATE	08.07.16		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 276

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: 75349
Part number: 350-630-011
Description: Skid tube
Welding Process: Tig[☒] Mig[]
Base material: Alum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier David Smith Date of Test Coupon 11.11.22

Welder Barclay Elliot Date of Test Coupon 11.11.22

The above named individual is qualified in accordance with AWS D17.1.2001 to weld